

Voluntary blood donation in India: Achievements, expectations and challenges

Neelam Marwaha

Department
of Transfusion
Medicine, Postgraduate
Institute of Medical
Education and
Research, Chandigarh,
Haryana and Punjab,
India

Brief text of the ISBTI oration delivered on 18-10-2014 on the occasion of Annual Conference of the Indian Society of Blood Transfusion and Immunohaematology

The first records of the voluntary blood donation initiative in India can be traced back to 1942, during the time of World War II when the first blood bank was established in Kolkata, West Bengal.^[1] The blood bank was set up at that time to fulfill the blood needs of those injured in the battle field. Government employees and those of British owned industrial houses volunteered to donate blood for this humanitarian cause. Once the war ended, the enthusiasm waned and blood bank collections were largely from professional or the paid blood donors. A decade passed by till Mrs. Leela Moolgaokar initiated voluntary blood donation drives in Bombay (now Mumbai) from 1954 onwards. She was inspired by the blood need of her injured son. The 1960s showed expanding efforts — Kolkata (Jadhavpur University), Ahmedabad and Delhi (Red Cross Societies) and Chandigarh (Blood Bank, PGI along with a group of voluntary social workers, Blood Bank Society). In 1971, Prof. J.G. Jolly the founder President of the Indian Society of Blood Transfusion and Immunohaematology took the movement to further heights and the Society under his stewardship declared October 1 as National Voluntary Blood Donation Day which was later accepted by the government too. Since then many blood donor organizations came up in different regions of the country in support of the noble cause of voluntary blood donation.

Two major triggers for blood safety in India which revamped the blood transfusion services (BTS) and placed thrust on voluntary blood donation were :

1. The HIV pandemic and
2. The Public Interest Litigation (PIL) — Common Cause versus Union of India (1992).

In response to the HIV pandemic, blood safety became an important component of National AIDS Control programme and the key objectives for BTS were:

1. Modernization of blood banks.
2. Promotion of voluntary blood donation.
3. Human resource development and
4. Quality systems in BTS.

Outcome of the PIL was a landmark judgement^[2] directing the Central government to:

1. Establish national and state blood transfusion councils.
2. Mandatory licensing of all blood banks and
3. Ban on professional blood donors from January 1998.

The National Blood Policy (2002) and an Action Plan for Blood Safety (2003) were adopted by the Government of India. Objective 4 of the Action Plan states “To launch intensive awareness programmes for donor information, education, motivation, recruitment and retention in order to ensure adequate availability of safe blood”.^[3]

National Blood Transfusion Council (NBTC) was constituted within National AIDS Control Organisation (NACO) and similarly State Blood Transfusion Council (SBTCs) were established within State AIDS Control Societies (SACS). Each SBTC was directed to undertake a communication needs assessment and develop an IEC (Information, Education and Communication) strategy within its jurisdiction. The NBTC was entrusted with planning a national campaign. Nationwide IEC campaigns were conducted for donor motivation, recruitment, selection and retention. Electronic and print media were extensively utilized; television shows, advertisements, radio talks, newspapers, posters, pamphlets, hoardings, stickers, in addition donor greeting cards, calendars, new year diaries and small token gifts displaying messages of voluntary blood donation were distributed widely. Motivational talks were given in high schools and colleges. Voluntary blood donors were honoured on National Voluntary Blood Donation Day (October 1) and World Blood Donor day (June 14) by Central/State governments as well as by blood banks/departments of transfusion medicine within hospitals and medical institutions. Blood mobiles — State of Art — Fully equipped

Access this article online

Website: www.ajts.org

DOI: 10.4103/0973-6247.157011

Quick Response Code:



Correspondence to:
Dr. Neelam Marwaha,
Department of Transfusion
Medicine, Postgraduate
Institute of Medical
Education and Research,
Sector 12, Chandigarh -
160 012, India.
E-mail: neelam2918@yahoo.com

vans have been provided by NACO to various states to facilitate blood donation.

The concerted efforts by the government, non-governmental organizations and staff in the blood transfusion services has witnessed a progressive increase in voluntary blood donation (VBD) in the country. In the year 2006-07, VBD was only 54.4%, it increased steadily to 59.1% in 2007-08, 61.7% in 2008-09, 74.1% in 2009-10 to 79.4% in 2010-11 and 83.1% in 2011-12. The total annual collection has also shown an absolute increase 4.4 million blood units in 2007-08 to 9.3 million units in 2012-13.^[4] Organizations have come forward in large numbers to support the cause-educational institutions, religious organizations, government departments, corporate houses, defense services, many non-governmental organizations and charitable societies. Some voluntary organizations have also taken the initiative to facilitate blood availability in case of rare blood groups. Think Foundation^[5] and Sankalp Foundation^[6] are two such organizations providing help to patients with the rare Bombay blood group. Commensurate with the increase in VBD, the HIV sero-reactivity in blood donors has decreased from 1.2% to 0.2%.^[4]

A remarkable step forward in the concern for blood donor safety was the initiative for revealing the transfusion transmitted infections (TTIs) status to the individuals after taking the consent in respect of disclosing the results of the tests. Testing for TTIs not only improves the blood supply but it also serves a critical public health function of identifying individuals who are asymptotically infected, can seek early treatment and prevent secondary transmission.

The current scenario is definitely hopeful however challenges continue to exist. The target for the country is to achieve more than 90% VBD. There are marked regional variations, some states collect voluntary blood units more than the national average, others are far below in meeting targets. The VBD in almost 13 states of the country is less than 50%. Seasonal variations also account for fluctuations in blood collections. The voluntary blood donation is less during extremes of weather conditions like harsh summer or winter months. It is also affected by examination periods of students and vacations of educational institutions. India has a huge burden of patients with thalassaemia major who not only require life sustaining regular transfusion support but are also challenged by alloimmunization to minor blood group antigens.^[7] This complication places further constraints on the BTS to issue compatible blood. Establishment of Rare Donor Registries is a much needed step in this direction. So

far the focus of VBD has been on whole blood collection, but little attention has been given to apheresis donors who are currently brought to the blood bank by the patients' attendants. Apheresis platelets presently are prepared from patient's relatives and/or friends. Voluntary plateletpheresis donations have been initiated in some centers, but the movement needs to gain strength. The government has plans to set up a national plasma fractionation centre and also to support existing ones to supply plasma derived medicinal products. The only help for haemophiliac patients now is fresh frozen plasma or cryoprecipitate, the availability of factor concentrates is restricted by lack of indigenously prepared coagulation factor VIII or IX concentrates. Plasmapheresis donors may also need to be enrolled in times to come.

Thus in conclusion it can be stated with confidence that our VBD programme is gaining strength, but the progress in different regions of the country is variable. We also need to look beyond whole blood VBD and expand our horizons to apheresis donors and rare blood group donors.

References

1. National Guidebook on Blood Donor Motivation. 2nd ed. National AIDS Control Organization. Ministry of Health and Family Welfare. India: Government of India; 2003. p. 32-5.
2. Blood Transfusion Services in India following the Supreme Court Judgement in the common cause versus Union of India. In: The blood banker legal hand book. Sarin Memorial legal foundation 2003. p. 54-70.
3. An Action Plan for Blood Safety 2003. National AIDS Control Organization. Ministry of Health and Family Welfare. India: Government of India; 2007.
4. Annual Reports 2007-08 to 2012-13. Department of AIDS Control, Ministry of Health and Family Welfare, Government of India. Available from: <http://www.nacoonline.org>. [Last accessed on 2014 Oct 5].
5. Available from: <http://www.thinkfoundation.org>. [Last accessed on 2014 Oct 6].
6. Available from: <http://www.sankalpindia.net>. [Last accessed on 2014 Oct 5].
7. Dhawan HK, Kumawat V, Marwaha N, Sharma RR, Sachdev S, Bansal D, *et al*. Alloimmunization and autoimmunization in transfusion dependent thalassemia major patients: Study on 319 patients. *Asian J Transfus Sci* 2014;8:84-8.

Cite this article as: Marwaha N. Voluntary blood donation in India: Achievements, expectations and challenges. *Asian J Transfus Sci* 2015;9:S1-2.

Source of Support: Nil, **Conflicting Interest:** None declared.